

In the Claims

Canceled Claims

Please cancel claims 1-10 and 19 to 20 as being directed to subject matter in the parent application the claims of which have been allowed and the issue fee paid.

Amended Claims

- 1.(canceled)
- 2.(canceled)
- 3.(canceled)
- 4.(canceled)
- 5.(canceled)
- 6.(canceled)
- 7.(canceled)
- 8.(canceled)
- 9.(canceled)
- 10.(canceled)

11.(currently amended) A method for producing soy pectin comprising the steps of:
extracting a soybean hull/hypocotyl mixture in a mineral acid at an elevated temperature and
for a time and at a pH sufficient to form a pectinaceous soy material from the mixture;
cooling the ~~extracted~~ pectinaceous soy material while raising the pH of the pectinaceous soy
material;
separating a soluble pectinaceous soy material from ~~a solid~~ an insoluble residue;
precipitating the soluble pectinaceous soy material in an alcohol to form a precipitated
pectinaceous soy material; and
drying the precipitated pectinaceous soy material to form a soy pectin.

12.(previously presented) The method of claim 11, further comprising the step of:
pre-washing the soybean hull/hypocotyl mixture in the presence of a solvent for a time and
temperature sufficient for a liquid fraction of the mixture to obtain a percent transmittance of above
about 35%.

13.(previously presented) The method of claim 12, further comprising the step of:
after pre-washing, soaking the soybean hull/hypocotyl mixture in the presence of a solvent
for a time, temperature and pH sufficient to expand the cellular matrix of the soybean hull/hypocotyl
mixture.

1 14.(previously presented) The method of claim 11, further comprising the step of:
2 post-washing the precipitated pectinaceous soy material with pressing in the presence of a
3 solvent a sufficient number of times to form a washed precipitated pectinaceous soy material.

1 15.(previously presented) The method of claim 14, wherein the post-washing step comprising:
2 washing the precipitated pectinaceous soy material at least three times with a 70% 2-propanol
3 aqueous solution with pressing after each washing to form a first washed precipitated pectinaceous
4 soy material; and
5 washing the first washed precipitated pectinaceous soy material at least two times with 100%
6 2-propanol with pressing after each washing to form the washed precipitated pectinaceous soy
7 material.

1 16.(previously presented) The method of claim 14, further comprising the step of:
2 prior to drying, slowly evaporating residual 2-propanol present in the washed precipitated
3 pectinaceous soy material for a time sufficient to enhance a whiteness of the soy pectin.

1 17.(previously presented) The method of claim 11, wherein the drying step comprises:
2 evaporating residual 2-propanol from the precipitated pectinaceous soy material for a time
3 sufficient to enhance a whiteness of the soy pectin; and
4 drying the precipitated soy pectinaceous material under a vacuum at an elevated evaporation
5 temperature.

1 18.(previously presented) The method of claim 11, further comprising the step of:
2 grinding the soy pectin.

19.(canceled)

20.(canceled)

1 21.(currently amended) A method for producing soy pectin comprising the steps of:
2 pre-washing a hull/hypocotyl mixture in the presence of a solvent for a time and at a
3 temperature sufficient to produce a pre-washed hull/hypocotyl mixture, where a liquid fraction
4 thereof has a percent transmittance above about 35%;

1 extracting the pre-washed hull/hypocotyl mixture in a mineral acid at an elevated temperature
2 for a time and at a pH sufficient to form a soy pectinaceous-containing mixture;
3 cooling the soy pectinaceous-containing mixture while raising the pH;
4 separating a soluble soy pectinaceous material from ~~a solid~~ an insoluble residue;
5 precipitating the soluble soy pectinaceous material in an alcohol to form a precipitated soy
6 pectinaceous material; and
7 drying the precipitated soy pectinaceous material to form soy pectin.

1 **22.(previously presented)** The method of claim 21, further comprising the step of:
2 soaking the pre-washed hull/hypocotyl mixture in the presence of a solvent for a time, at a
3 temperature, and at a pH sufficient to expand the cellular matrix of the pre-washed extraction
4 hull/hypocotyl mixture.

1 **23.(previously presented)** The method of claim 21, further comprising the step of:
2 post-washing the precipitated soy pectinaceous material in the presence of a solvent with
3 pressing after each post-washing a sufficient number of times to form a washed precipitated soy
4 pectanecous material.

1 **24.(previously presented)** The method of claim 23, wherein the post-washing step comprises:
2 washing the precipitated soy pectinaceous material at least three times with a 70% 2-propanol
3 aqueous solution with pressing after each washing to form a first washed precipitated soy
4 pectinaceous material; and
5 washing the first washed precipitated soy pectinaceous material at least two times with 100%
6 2-propanol with pressing after each washing to form the washed precipitated soy pectinaceous
7 material.

1 **25.(previously presented)** The method of claim 23, further comprising the step of:
2 prior to drying, slowly evaporating residual 2-propanol from the washed precipitated soy
3 pectinaceous material for a time sufficient to enhance a whiteness of the soy pectin.

1 **26.(previously presented)** The method of claim 21, wherein the drying step comprises:

1 slowly evaporating residual 2-propanol from the precipitated soy pectinaceous material for
2 a time sufficient to enhance a whiteness of the soy pectin; and
3 drying the precipitated soy pectinaceous material under a vacuum at an elevated evaporation
4 temperature.

1 27.(previously presented) The method of claim 21, further comprising the step of:
2 after drying, grinding the soy pectin.

1 28.(currently amended) A method for producing soy pectin comprising the steps of:
2 pre-washing the hull/hypocotyl mixture in the presence of a solvent for a time and
3 temperature sufficient to produce a pre-washed hull/hypocotyl mixture, where a liquid fraction
4 thereof has a percent transmittance above about 35%;
5 soaking the pre-washed hull/hypocotyl mixture in the presence of a solvent for a time, at a
6 temperature and at a pH sufficient to expand the cellular matrix of the pre-washed hull/hypocotyl
7 mixture;
8 extracting the pre-washed hull/hypocotyl mixture in a mineral acid at an elevated temperature
9 for a time and at a pH sufficient to form a soy pectinaceous-containing mixture;
10 cooling the soy pectinaceous-containing mixture while raising the pH;
11 separating a soluble soy pectinaceous material from ~~a solid~~ an insoluble residue;
12 precipitating the soluble soy pectinaceous material in an alcohol to form a precipitated soy
13 pectinaceous material; and
14 drying the precipitated soy pectinaceous material to form soy pectin.

1 29.(previously presented) The method of claim 28, further comprising the step of:
2 post-washing the precipitated soy pectinaceous material in the presence of a solvent with
3 pressing after each post-washing a sufficient number of times to form a washed precipitated soy
4 pectanecous material.

1 30.(previously presented) The method of claim 29, wherein the post-washing step comprises:

1 washing the precipitated soy pectinaceous material at least three times with a 70% 2-propanol
2 aqueous solution with pressing after each washing to form a first washed precipitated soy
3 pectinaceous material; and

4 washing the first washed precipitated soy pectinaceous material at least two times with 100%
5 2-propanol with pressing after each washing to form the washed precipitated soy pectinaceous
6 material.

1 31.(previously presented) The method of claim 29, further comprising the step of:
2 slowly evaporating residual 2-propanol from the washed precipitated soy pectinaceous
3 material for a time sufficient to enhance a whiteness of the soy pectin.

1 32.(previously presented) The method of claim 28, wherein the drying step comprises:
2 slowly evaporating residual 2-propanol from the precipitated soy pectinaceous material for
3 a time sufficient to enhance a whiteness of the soy pectin; and
4 drying the precipitated soy pectinaceous material under a vacuum at an elevated evaporation
5 temperature.

1 33.(previously presented) The method of claim 28, further comprising the step of:
2 after drying, grinding the soy pectin.